

153. *Hylocichla aliciae*. GRAY-CHEEKED THRUSH.— Very rare; seen only during migration and then very seldom.

154. *Hylocichla ustulata swainsoni*. OLIVE-BACKED THRUSH.— The most common of the thrushes. It places its nest from two to twenty-five feet above ground.

155. *Hylocichla guttata pallasii*. HERMIT THRUSH. — Very rare. Seen only during migration.

156. *Planesticus migratorius*. ROBIN.— Very common. This bird nests almost as abundantly in the deep woods as in the more open and settled portions. Two broods are usually raised.

157. *Sialia currucoides*. MOUNTAIN BLUEBIRD.— Very common in the open portions of the country but never seen in the heavily wooded sections. Two broods are raised.

THE BIRDS OF COLORADO — THIRD SUPPLEMENT.

BY WELLS W. COOKE.

THE original 'Birds of Colorado' was published in 1897 as Bulletin No. 37 of the Colorado State Agricultural Experiment Station. It was followed a year later by the first supplement as Bulletin No. 44 of the same institution, and the second supplement was published in 1900 as Bulletin No. 56. The original bulletin enumerated 363 species as occurring in Colorado, of which 230 were known to breed in the State. The next year the total was increased to 374 and the breeders to 236. The year 1900 showed 387 species known to occur in the State, with 243 breeders.

The present publication withdraws 12 of these 387 as having been admitted to the State list on insufficient evidence or as not now considered valid forms. At the same time it recognizes 22 additional species as entitled to a place in the State list. Thus the present known avifauna of Colorado totals 397 species — a number probably exceeded by only two States, California and Texas. It is interesting to note that of these 22 additions, 9 had been mentioned in the second supplement as likely to occur in Colorado, while the other 13 are unexpected additions or arise from the recognition of subspecific forms. The number of species now known to breed in

Colorado is 248. Among the species dropped from the State, the following five had been counted among the breeders: *Phalacroptilus nuttalli nitidus*, *Astragalinus psaltria arizonæ*, *Spizella passerina*, *Dendroica æstiva sonorana*, and *Sitta carolinensis*. The list of breeders has had ten additions: *Marila americana*, *Marila vallisneria*, *Marila affinis*, *Pediæetes phasianellus columbianus*, *Dryobates villosus*, *Cyanocitta cristata*, *Agelaius phæniceus neutralis*, *Icterus spurius*, *Peucæa cassini*, and *Vireo belli*.

The Bibliography of Colorado Ornithology.

The original bulletin contained the titles of 182 articles on Colorado birds, to which were added 15 in the first supplement and 28 in the second — a total of 225 titles. Publications on Colorado ornithology have become increasingly abundant during the past few years and the following pages mention 114 titles, nearly all of which have appeared within the last nine years, *i. e.*, half as many articles have been written about Colorado birds in the last nine years as in the preceding seventy years. The statement was made in the original bulletin, that 23 titles had been omitted as being only incidental references to Colorado birds. This number can now be increased by 62 additional articles that make some statements or contain some records of Colorado birds, but are not considered of enough importance to be listed here individually.

The bibliography of Colorado ornithology stands at present therefore as follows.

More important titles to 1900 . . .	225
Additional titles 1900-1909 . . .	118
Less important titles	91
Total	434

The following list contains in chronological order, the more extended and important articles on the birds of Colorado that have been published since 1900, and also a few issued previously that were not noted in 'Birds of Colorado.'

Abert, J. W. Report of the expedition led by Lieutenant Abert on the upper Arkansas and through the country of the Camanche Indians in the fall of the year 1845. Journal of Lieutenant J. W. Abert, from Bent's Fort to St. Louis in 1845. 29th. Cong., First Session, Sen. Doc. VIII, No. 438, 1846, 1-75.

Notes on several species of birds seen on a journey from the mouth of the Purgatory to Raton Pass.

Abert, J. W. Notes of a military reconnoissance from Fort Leavenworth in Missouri to San Diego, in California, including part of the Arkansas, Del Norte and Gila Rivers, by Lieut. Col. W. H. Emory. Appendix No. 6. Notes of Lieut. J. W. Abert. 30th Cong., First Session, Exec. Doc. No. 41, 1848, 386-546.

Contains a list of birds found in the vicinity of Bent's Fort, and additional notes on those seen between Bent's Fort and Raton Pass over nearly the same road as that travelled the previous year. Had these two reports by Lieut. Abert been available when the original 'Birds of Colorado' was written, there would have been several changes in the statement of who first recorded each species in Colorado. Abert's two reports together contain the first records for the State of thirteen species.

Allen, J. A. Ornithological notes from the West, II, Notes on the birds of Colorado. American Naturalist, VI, 1872, 342-351, 404.

A narrative account of the birds seen on the trip, containing the same notes that were published more at length in Bull. Mus. Comp. Zool., III, 1872, 113-183.

Anthony, A. W. Secondary migration of birds. Zoe, I, 1891, 379-381.

Records the fact that the White-crowned Sparrow in southwestern Colorado, raises its two broods at different altitudes.

Breninger, G. F. American and Mexican Crossbills. Nidologist, I, 1894, 99-101.

Extended notes on the nest and nesting habits in El Paso County.

Chamberlain, C. The Water Ouzel at home. Nidologist, I, 1894, 163-164.

Nesting habits as observed near Golden.

Dawson, W. Some western horizons. No. II. Wilson Bulletin, VI, 1899, 49-50.

A list of the birds seen at Julesburg. Contains the first record for the State of the Piping Plover.

Burnett, W. L. The Indigo Bunting in Colorado. Condor, II, 1900, 90.

A party of eight or ten at Fort Collins, the spring of 1900.

Dille, F. M. Nesting of the Eastern Bluebird at Denver, Colorado. Condor, II, 1900, 88.

A pair nested there in 1899.

Felger, A. H. The Mexican Cormorant in Colorado. Auk, XVIII, 1901, 189.

The first record for the State.

Osgood, W. H. New subspecies of North American birds. Auk, XVIII, 1901, 179-185.

Original description of *Lagopus leucurus altipetens*, with type-locality in Colorado. It has since been ascertained that this name is a synonym of *Lagopus leucurus*.

Burnett, W. L. The Rose-breasted Grosbeak in Colorado. Condor, IV, 1902, 94.

A pair near Loveland, June 1, 1902.

Dille, F. M. Western Blue Grosbeak in northern Colorado. Condor, IV, 1902, 94.

One at Altona — the most northern record for the State.

Felger, A. H. Colorado bird notes. Auk, XIX, 1902, 294.

New records of breeding and extensions of known range for several species.

Oberholser, H. C. A review of the Larks of the genus *Otocoris*. Proc. U. S. Nat. Mus., XXIV, 1902, 801-884.

Contains the first record for Colorado of *Otocoris alpestris praticola*.

Dille, F. M. Nesting dates for birds in the Denver District, Colorado. Condor, V, 1903, 73-74.

An extended list, giving the average dates for full sets of the first laying.

Henderson, J. Preliminary list of birds of Boulder County, Colorado. University of Colorado Studies, I, 1903, 233-237.

An unannotated list of 160 species.

Smith, H. G. Bell's Vireo (*Virco bellii*) in Colorado. Auk, XX, 1903, 438.

The first record for the State.

Burnett, L. E. Whippoorwill (*Antrostomus vociferus*), a new bird for Colorado. Auk, XXI, 1904, 278-279.

One at Fort Collins, about September 14, 1903.

Dille, F. M. Eggs of Flammulated Screech Owl and Western Evening Grosbeak, taken in Estes Park, Colorado. Condor, VI, 1904, 50.

The eggs were taken in June, 1903, and for the Grosbeak are the first reported from the State.

Dille, F. M. A Sage Sparrow in Boulder County, Colorado. Condor, VI, 1904, 79.

This is the first record for the State, east of the mountains.

Henderson, J. Additional list of Boulder County birds, with comments thereon. University of Colorado Studies, II, 1904, 107-112.

Adds 46 species to his list of the previous year.

Warren, E. R. A Sandhill Crane's nest. Condor, VI, 1904, 39-40.

Eggs found June 5, 1903, in Gunnison County.

Henderson, J. Colorado notes. Auk, XXII, 1905, 421-422.

First record for the State of the Wood Thrush.

Howell, A. H. Scott's Sparrow in Colorado. Auk, XXII, 1905, 210.

The first record for the State.

Smith, H. G. The Blue Jay and other eastern birds at Wray, Yuma County, Colorado. Auk, XXII, 1905, 81-82.

The record of the Blue Jay is the first for the State.

Warren, E. R. Cassin's Sparrow in Colorado. Auk, XXII, 1905, 416.

First record for the State.

Ferrill, W. C. Biennial Report of the State Historical and Natural History Society of Colorado, December 1, 1904–November 30, 1906. Denver, 1906, 1–19.

Contains, on page 14, advance notice of new records for Colorado birds, given more in detail by H. G. Smith, Auk, XXV, 1908, 184–191.

Henderson, J. With the birds in northeastern Colorado. Wilson Bulletin, XIII, 1906, 105–110.

Short account of the birds seen on a wagon trip in Weld County.

Warren, E. R. A collecting trip to southeastern Colorado. Condor, VIII, 1906, 18–24.

Extended field notes on 84 species, observed principally in Baca County.

Warren, E. R. *Contopus virens* in Colorado. Condor, VIII, 1906, 130.

The first record for the State.

Felger, A. H. Ross's Snow Goose in Colorado. Auk, XXIV, 1907, 211–212.

First record for the State.

Gilman, M. F. Magpies on the La Plata. Condor, IX, 1907, 9–12.

Extended account of the nesting habits.

Gilman, M. F. Migration and nesting of the Sage Thrasher. Condor, IX, 1907, 42–44.

As observed in southwestern Colorado.

Gilman, M. F. Some birds of southwest Colorado. Condor, IX, 1907, 152–158, 194–195.

Extended field notes on 120 species observed in the vicinity of Fort Lewis, La Plata County.

Henderson, J. Colorado notes. Condor, IX, 1907, 198.

New records for several of the rarer species of Colorado birds.

Hersey, L. J. and **Rockwell, R. B.** A new breeding bird for Colorado; the Cassin Sparrow (*Peucaea cassinii*) nesting near Denver. Condor, IX, 1907, 191–194.

The first breeding record of the bird for the State.

Oberholser, H. C. A new *Agelaius* from Canada. Auk, XXIV, 1907, 332–336.

Describes a new form as *Agelaius phœniceus arctolegus*, and records a specimen from Colorado. This subspecies has not as yet been accepted by the A. O. U. Committee.

Rockwell, R. B. The Woodhouse Jay in western Colorado. Condor, IX, 1907, 81–84.

Rockwell, R. B. Some Colorado notes on the Rocky Mountain Screech Owl. Condor, IX, 1907, 140–145.

Warren, E. R. Photographing Magpies. Condor, IX, 1907, 5–9.

Reproductions of several photographs taken at Crested Butte.

Warren, E. R. An interesting occurrence of the Canyon Wren. Condor, IX, 1907, 111.

Near Cheyenne Wells — the most eastern record for the State.

Burnett, W. L. Another Cañon Wren record for Colorado. Auk, XXV, 1908, 87. One at Longmont — the most northeastern record for the State.

Rockwell, R. B. Nesting of the Western Horned Owl in Colorado. Condor, X, 1908, 14-17.

Rockwell, R. B. The Red-winged Blackbirds of Colorado. Condor, X, 1908, 93.

First record for the State of *Agelaius phœniceus neutralis*.

Rockwell, R. B. An annotated list of the birds of Mesa County, Colorado. Condor, X, 1908, 152-180.

Notes on 154 species.

Sclater, W. L. The winter birds of Colorado. Ibis, 1908, 443-450.

Briefly annotated list of 78 species.

Smith, H. G. Random notes on the distribution of some Colorado birds, with additions to the State avifauna. Auk, XXV, 1908, 164-191.

Contains the first records for Colorado of *Dryobates villosus villosus*, *Junco hyemalis oregonus* and *Vireo vicinior*, and field notes on 32 other species, with many extensions of known range.

Warren, E. R. Northwestern Colorado bird notes. Condor, X, 1908, 18-26.

Field notes on 93 species seen during a five month's wagon trip.

Cary, M. New records and important range extensions of Colorado birds. Auk, XXVI, 1909, 180-185.

Adds *Cistothorus stellaris* to the State list and extends the known range of more than thirty species.

Cooke, W. W. Some new birds for Colorado. Auk, XXVI, 1909, 314.

Adds four species to the State list.

Dille, F. M. Notes of occurrence and nesting of certain species additional to the 'Birds of Colorado.' Auk, XXVI, 1909, 86-88.

Field notes on 11 species.

Felger, A. H. Colorado notes. Auk, XXVI, 1909, 85-86.

Field notes on three species.

Felger, A. H. Annotated list of the water birds of Weld, Morgan and Adams counties, Colorado, south to the first sectional line below the fortieth parallel. Auk, XXVI, 1909, 272-291.

Enumerates 79 species and adds the records of 29 others from neighboring parts of the State.

Frey, J. W. Random bird notes from Chaffee County, Colorado. Condor, XI, 1909, 70.

Field notes on 21 species.

Henderson, J. An annotated list of the birds of Boulder County, Colorado. University of Colorado Studies, VI, 1909, 219-242.

A briefly annotated list of 216 species, with a bibliography.

Hersey, L. J. and Rockwell, R. B. An annotated list of the birds of the Barr Lake District, Adams County, Colorado. Condor, XI, 1909, 109-122.

Enumerates 206 species taken within an area only fifteen miles in diameter.

Rockwell, R. B. The history of Colorado ornithology. *Condor*, XI, 1909, 24-32.

An account of the collectors who have worked in the State and the sections covered by their explorations.

Rockwell, R. B. The use of Magpies' nests by other birds. *Condor*, IX, 1909, 90-92.

Warren, E. R. Notes on the birds of southwestern Montrose County, Colorado. *Condor*, XI, 1909, 11-17.

Field notes on 114 species, with many extensions of the previously known range.

Warren, E. R. Some interesting Colorado records. *Condor*, XI, 1909, 33.

Notes on three species.

Less extended notes on Colorado birds will be found in the following articles.

Trippe, *American Naturalist*, VIII, 1874, 429-430.

Chambers, *American Naturalist*, X, 1876, 373.

Packard, *American Naturalist*, XII, 1878, 54.

Stone, *Ornithologist and Oölogist*, VI, 1881, 45-46, 67.

Smith, *Ornithologist and Oölogist*, IX, 1884, 76.

Anthony, *Nidologist*, II, 1895, 66-67.

Taylor, *Nidologist*, IV, 1896, 6.

Lowe, *Nidologist*, IV, 1897, 70.

Burnett, *Condor*, II, 1900, 89.

Jones, *Wilson Bulletin*, No. 33, 1900, 12.

Burnett, *Condor*, III, 1901, 114.

Henderson, *Wilson Bulletin*, VIII, 1901, 45-46.

Lowe, *Auk*, XVIII, 1901, 276.

Fisher, *Condor*, IV, 1902, 70.

Smith, *Auk*, XIX, 1902, 290.

Burnett, *Condor*, V, 1903, 156.

Dille, *Condor*, V, 1903, 79.

Felger, *Auk*, XX, 1903, 65 and 70.

Henderson, *Wilson Bulletin*, X, 1903, 74-75.

Warren, *Wilson Bulletin*, X, 1903, 87-91.

Bergtold, *Auk*, XXI, 1904, 78.

Henderson, *Wilson Bulletin*, XI, 1904, 27 and 92.

Henderson, *Auk*, XXI, 1904, 486.

Bailey, *Condor*, VII, 1905, 112.

Bishop, *Condor*, VII, 1905, 141-143.

Felger, *Auk*, XXII, 1905, 421.

Henderson, *Auk*, XXII, 1905, 82 and 315-316.

Hopkins, *Auk*, XXIII, 1906, 461.

Felger, *Condor*, IX, 1907, 110.

Felger, *Auk*, XXIV, 1907, 342.

- Henderson, Condor, IX, 1907, 162.
Henderson, Auk, XXIV, 1907, 440-442.
Knaebel, Auk, XXIV, 1907, 101.
Rockwell, Condor, X, 1908, 182.
Test, Auk, XXV, 1908, 226.
Bergtold, Auk, XXVI, 1909, 79 and 196-198.
Cary, Auk, XXVI, 1909, 312.
Felger, Condor, XI, 1909, 68-69.
Felger, Auk, XXVI, 1909, 191.
Richards, Condor, XI, 1909, 101.
Rockwell, Condor, XI, 1909, 33.
Warren, Auk, XXVI, 1909, 311-312.

The History of Colorado Ornithology.

The following additions have been made to the list of Colorado birds since the second appendix was published in 1900.

Dawson, Wilson Bulletin, VI, 1899, 50. *Ægialitis meloda* taken at Julesburg.

Felger, Auk, XVIII, 1901, 189. *Phalacrocorax vigua mexicanus* taken near Denver.

Oberholser, Proc. U. S. Nat. Mus., XXIV, 1902, 820-828. *Otocoris alpestris praticola* taken near Denver.

Keyser, Birds of the Rockies, 1902, 315. *Phalaropus fulicarius* taken by Preble at Loveland.

Smith, Auk, XX, 1903, 438. *Vireo belli* taken near Denver.

Burnett, Auk, XXI, 1904, 278. *Antrostomus vociferus* taken at Fort Collins.

Smith, Auk, XXII, 1905, 75. *Cyanocitta cristata* at Wray.

Howell, Auk, XXII, 1905, 210. *Aimophila ruficeps scotti* taken at Trinidad.

Warren, Auk, XXII, 1905, 416. *Peucaea cassini* taken near Springfield.

Henderson, Auk, XXII, 1905, 421. *Hylocichla mustelina* at Yuma.

Warren, Condor, VIII, 1906, 130. *Myiochanes virens* taken near Springfield.

Felger, Auk, XXIV, 1907, 211. *Chen rossi* taken near Longmont.

Rockwell, Condor, X, 1908, 93. *Agelaius phoeniceus neutralis* taken near Denver.

Smith, Auk, XXV, 1908, 185-189. *Dryobates villosus* taken near Wray; *Junco hyemalis oreganus* taken near Denver; *Vireo vicinior* taken at Lamar.

Cary, Auk, XXVI, 1909, 180-185. *Cistothorus stellaris* taken in the San Luis Valley, and *Pediæetes phasianellus columbianus* in western Colorado.

Cooke, Auk, XXVI, 1909, 314. *Sterna hirundo* by Osterhout at New Windsor; *Butorides virescens* by Preble at Loveland; *Spizella pusilla arenacea* and *Vermivora chrysoptera* by Patten at Yuma.

Recapitulation.

Total species credited to Colorado in 1900	.	.	.	.	.	387
To be withdrawn from this number	.	.	.	.	.	12
Correct Colorado list in 1900	.	.	.	.	.	375
Added since then.						
1899. W. L. Dawson	1	1905. E. R. Warren				1
1901. A. H. Felger	1	1905. J. Henderson				1
1902. H. C. Oberholser	1	1906. E. R. Warren				1
1902. L. S. Keyser	1	1907. A. H. Felger				1
1903. H. G. Smith	1	1908. R. B. Rockwell				1
1904. L. E. Burnett	1	1908. H. G. Smith				3
1905. H. G. Smith	1	1909. M. Cary				2
1905. A. H. Howell	1	1909. W. W. Cooke				4
Total Colorado list, 1909	.	.	.	.	.	397

The Birds of Colorado.

Colymbus auritus. HORNED GREBE.—Two near Barr, May 5, 1906 (Hersey and Rockwell).

Larus californicus. CALIFORNIA GULL.—One seen in 1905 at Coventry (Warren).

Larus franklini. FRANKLIN'S GULL.—One October 17, 1907, at Barr (Hersey and Rockwell).

Xema sabini. SABINE'S GULL.—A flock of six September 15, 1907, near Boulder (Henderson). Four specimens taken September 13–October 31, 1908 at Barr (Hersey and Rockwell).

Sterna forsteri. FORSTER'S TERN.—Twelve pairs were found breeding at Barr, May 19, 1900 (Felger).

Sterna hirundo. COMMON TERN.—The second supplement prophesied that this species would sometime be added to the list of Colorado birds, since it is a regular visitant to Kansas and Nebraska and has been taken at Cheyenne, Wyo. This prophecy is now fulfilled by the capture of a specimen, May 14, 1908, at New Windsor by G. E. Osterhout. The bird was sent to the Biological Survey for identification.

Phalacrocorax vigua mexicanus. MEXICAN CORMORANT.—The first record for Colorado is a specimen taken October 15, 1899, at Smith's Lake near Denver (Felger).

Mergus serrator. RED-BREASTED MERGANSER.—A mounted specimen was seen at La Veta (Cary), and the catalogue of the National Museum records a specimen taken at Fort Massachusetts [= Fort Garland]. These are the second and third records west of the front range.

Marila americana. REDHEAD.—This species can now be added to the list of the breeding birds of Colorado as it is known to have nested at Barr Lake, Adams County (Hersey and Rockwell).

Marila vallisneria. CANVAS-BACK.—This also joins the breeding birds, since eggs were found July 4, 1900, at Barr Lake (Felger).

Marila affinis. LESSER SCAUP DUCK.—A few breed at Barr Lake (Hersey and Rockwell). A new breeding record for the State.

Marila collaris. RING-NECKED DUCK.—One taken at Coventry in April, 1906 (Warren). This is the first record west of the main range.

Harelda hyemalis. OLD-SQUAW.—One at Longmont, about November 20, 1903 (Smith). Five specimens at different times taken in the vicinity of Denver (Felger).

Oidemia deglandi. WHITE-WINGED SCOTER.—Several additional records: near Longmont, October 20, 1901 (Henderson); Loveland, October 11, 1903 (Bergtold); LaSalle, October 24, 1904 (Smith); near Denver, six or more on September 14, 1907 (Henderson).

Chen rossi. ROSS'S GOOSE.—An addition to Colorado birds. One December 23, 1906 near Longmont (Felger).

Plegadis guarauna. WHITE-FACED GLOSSY IBIS.—Additional records are: Barr, May 25-31, 1907 and April 4-June 21, 1908 (Hersey and Rockwell); two additional specimens near Denver (Felger); one near Norwood, Montrose County, September 21, 1907 (Warren).

Mycteria americana. WOOD IBIS. Two August 30, 1902 near Denver (Felger).

Herodias egretta. AMERICAN EGRET.—One seen near Denver April 26 and 27, 1907 (Rockwell). One specimen taken at Barr (Hersey and Rockwell).

Egretta candidissima. SNOWY HERON.—Several more records: Taberquache Park, April 15, 1906 (Warren); Naturita, one, 1908 (Warren); near Kremmling, May 17, 1907 (Warren); LaVeta (Cary); near White River P. O., 1905 (Cary); Springfield, two reported (Warren); Salida, May 22, 1908 (Frey); near Denver, May 11, 1907; May 9-10, 1908; June 13, 19, 28, 1908 (Rockwell); La Salle, Salida and Denver (Felger). Fort Collins and White River P. O. seem to be the most northern localities for the species in Colorado.

Butorides virescens. GREEN HERON.—Added to the Colorado list by Edward A. Preble of the Biological Survey who saw one at Loveland July 23, 1895.

Nyctanassa violacea. YELLOW-CROWNED NIGHT HERON.—A second record for the State is that of a party of five seen May 1, 1908, at Salida (Warren).

Grus mexicana. SANDHILL CRANE.—A recent record of nesting is a set of eggs found June 5, 1903, in Gunnison County at 8000 feet (Warren).

Rallus virginianus. VIRGINIA RAIL.—Winters at Barr (Hersey and Rockwell).

Porzana carolina. CAROLINA RAIL.—One found dead on the surface of the ice near the terminal moraine of Arapahoe Glacier, September 1903, at 12,000 feet altitude (Henderson).

Fulica americana. COOT. A few winter at Barr (Hersey and Rockwell).

Phalaropus fulicarius. RED PHALAROPE.—This is the second species added by Edward A. Preble to the State list. He captured a specimen

July 25, 1895, at Loveland. The finding of these two species by Mr. Preble is one of the strange circumstances connected with Colorado ornithology. W. G. Smith and Wm. Osburn lived at Loveland and collected there assiduously for years. Mr. Preble visited there one week and saw two species not detected by the other collectors.

Gallinago delicata. WILSON'S SNIFE.—Several nests and sets of eggs found each of the past five years on the plains near Boulder (Dille).

Ereunetes mauri. WESTERN SANDPIPER.—Not common migrant at Barr (Hersey and Rockwell).

Calidris leucophæa. SANDERLING.—One May 31, 1908, and several the fall of 1908 at Barr (Hersey and Rockwell).

Helodromas solitarius cinnamomeus. WESTERN SOLITARY SANDPIPER.—The early publications on Colorado ornithology included this species among the breeding birds of the State, and the same reference has been continued by subsequent writers. As neither eggs nor young birds have ever been reported from the State the assumption of breeding rests on the presence of the bird in pairs during the summer season. Late investigations have shown that many non-breeding Solitary Sandpipers remain through the summer far south of the breeding grounds, and also that the southward migration of breeding birds begins soon after the first of July. In the light of these facts it must be considered, that though the species probably does breed in Colorado, yet the actual breeding is not yet proven.

Bartramia longicauda. UPLAND PLOVER.—Several heard at night in migration in northwestern Colorado August 6-14, 1905. One seen August 9, 1907, at the head of Smith Fork in the West Elk Mountains, Gunnison County, was at an unusually high altitude—7000 feet, while the record is the most southwestern for the State (Cary). Eggs June 28, 1907, near Barr Lake (Hersey and Rockwell).

Charadrius dominicus. GOLDEN PLOVER.—Additional records are: one at Newcastle, October 5, 1902 (Bishop); one near Denver, May 17, 1907 (Rockwell).

Ægialitis semipalmata. SEMIPALMATED PLOVER.—One April 27, 1907, near Denver (Rockwell).

Ægialitis meloda. PIPING PLOVER.—Added to the Colorado list by the record of one taken May 16-17, 1899, at Julesburg (Dawson).

Podasocys montanus. MOUNTAIN PLOVER.—The most western record for the State seems to be that of a specimen taken by Henshaw June 10, 1873, near the site of the present town of Del Norte.

Colinus virginianus. BOB-WHITE.—Sixty years ago Lieut. J. W. Abert spent a summer at Bent's Fort on the Arkansas and he says that quail like those of the eastern United States were then to be found in that neighborhood. There can be no doubt that these birds were native.

Arenaria interpres morinella. RUDDY TURNSTONE.—Three at Barr, September 9, 1907 (Hersey and Rockwell).

Callipepla squamata. SCALED QUAIL.—Common in Baca County east nearly to the Kansas line and north to Lamar. It is claimed that the birds

have been working eastward and that they did not reach eastern Baca County until about fourteen years ago (Warren). Two near Mattison, Elbert County, May 4, 1909 (Cary).

Lophortyx californicus. CALIFORNIA QUAIL.—Introduced at Grand Junction and has spread up the Gunnison Valley to Hotchkiss where it was abundant in August, 1907. Introduced at Mancos and spreading in Montezuma County. One seen near Dolores June 25, 1907 (Cary).

Tympanuchus americanus. PRAIRIE CHICKEN.—Gradually extending westward in eastern Colorado as the native sod gives place to farms and wheatfields. It now breeds at least as far west as Yuma, Wray County (Patten). Nested in 1907 and 1908 near Barr (Hersey and Rockwell). This is the most western record in the United States.

[**Tympanuchus pallidicinctus.** LESSER PRAIRIE CHICKEN.—A few Prairie Chickens are reported as still present in southeastern Baca County. These should be the above form, but no specimens have been secured to settle the matter.]

Pediceetes phasianellus campestris. PRAIRIE SHARP-TAILED GROUSE.—As stated below, the form of western Colorado is *columbianus*. The bird of the plains of Colorado has always been referred to *campestris* and for the present that is probably the best that can be done. The final settlement of the proper name for the Sharp-tail of northeastern Colorado may prove difficult, as *campestris* is probably now extinct in the State.

Pediceetes phasianellus columbianus. COLUMBIAN SHARP-TAILED GROUSE.—It has at last been ascertained that this is the form which occurs in Colorado west of the main range. The species is known now to be present locally over much of western and southwestern Colorado south to McElmo Cañon, Montezuma County, and to Pagosa Springs, Archuleta County (Cary). A specimen taken February 12, 1907, at Castle Rock was sent to the Biological Survey for examination proves to be this form.

Meleagris gallopavo silvestris. WILD TURKEY.—As late as 1906 it was reported that a few Turkeys still inhabited southern Las Animas County (Warren). They are entered as the above form, but conclusive proof is still lacking that this form has ever occurred in Colorado. The records left by Say and Abert prove conclusively that in their day, the range of the Turkey extended without a break from Oklahoma, up the Arkansas and the Purgatory to Raton Pass and thence down the Canadian to Oklahoma. Under those conditions it is fair to presume that the birds of southeastern Colorado were the same form as those farther east.

Meleagris gallopavo merriami. MERRIAM'S TURKEY.—Almost if not quite extinct now in Colorado. The latest reports come from near Pagosa Springs and Mancos (Cary).

Zenaidura macroura carolinensis. MOURNING DOVE.—Wintered at Navajo Springs, La Plata County (Gilmore). One seen at Beulah January 4, 1904, and a few remained there the winter of 1905-6 (Jones).

Aluco pratincola. BARN OWL.—One near Mancos and one near Fort Lewis (Gilmore). One at Denver, March 29, 1907, and one at Holly, May 24, 1907 (Smith).

[**Strix varia.** BARRED OWL.—The known range of this species has been carried much further west by a specimen taken March, 1905, at Bear Lodge, Crook County, Wyo., and sent to the Biological Survey for identification.]

Strix occidentalis. SPOTTED OWL.—Two in spring near Fort Lewis (Gilman).

Otus asio maxwelliæ. ROCKY MOUNTAIN SCREECH OWL.—A pair nested in 1906 on Dry Willow Creek, Yuma County; one of the birds taken June 9, 1906, was sent to the Biological Survey for identification (Smith). Thus this form occurs not only in the mountains but far out on the plains, almost to the Kansas line.

Otus flammeola. FLAMMULATED SCREECH OWL.—One specimen, near Fort Lewis (Gilman). A mounted specimen at Glenwood Springs, presumably taken in the State (Cary). A set of eggs is recorded in the catalogue of the egg collection of the National Museum as taken in Estes Park June 21, 1891. Two sets of eggs were taken at the same place in June, 1903 (Dille).

[**Bubo virginianus arcticus.** ARCTIC HORNED OWL.—This form has been credited to Colorado by several writers; since the great variations in color became known of the Western Horned Owl, *pallescens*, doubt has arisen as to whether the true Arctic Horned Owl ever occurs in the State. For the present at least it better be dropped from the Colorado list.]

Geococcyx californianus. ROAD-RUNNER.—One at Los Animas August, 1907 (L. R. Cooke). The northeastern limit of the range in Colorado is a few miles south of Lamar (Cary). One, March 15, 1907, at Shawnee, on the Platte at 8125 feet altitude; another October 12, 1907, at Marshall Pass, about 10,000 feet altitude (Hersey). Both of these are much higher than the usual range of the species.

[**Coccyzus americanus.** -YELLOW-BILLED CUCKOO.—The whole of Colorado is within the known range of the western Yellow-billed Cuckoo, *occidentalis*. As the actual record on which the eastern bird was admitted can never be known, it seems best to drop it from the Colorado list.]

Coccyzus erythrophthalmus. BLACK-BILLED CUCKOO.—One May 21, 1904, at Wray (Smith). One at the same place May 22, 1909 (Cary).

Dryobates villosus. HAIRY WOODPECKER.—A pair were nesting June 9, 1906, at Dry Willow Creek, Yuma County; they were identified by the Biological Survey as intermediates but nearer the eastern bird, thus introducing this form to the Colorado fauna (Smith). Other and later specimens show that this is the form of the Arkansas Valley as far west as Fowler (Smith).

[**Dryobates pubescens.** DOWNY WOODPECKER.—Since no specimen of this form is known to have been taken in the State, it better be dropped from the list of Colorado birds. It is interesting in this connection to note

that a Downy Woodpecker taken at Holly in extreme eastern Colorado is *homorus*, the same as the bird of the mountains.]

Dryobates scalaris bairdi. TEXAS WOODPECKER.— A long extension of the known range to the eastward results from the finding of this species in Baca County; four were taken April 17, 1905, and one May 12, 1905, near Springfield (Warren). Several at Swink, October 29, 1908 (Smith).

Centurus carolinus. RED-BELLIED WOODPECKER.— Seen at Yuma, October 1, 2 and 3, 1906 (Patten).

Colaptes auratus luteus. NORTHERN FLICKER.— One, October 5, 1906, at Yuma (Patten). One, October 24, 1904, Hall Valley, Park County, at 10,000 feet (Felger).

Lieut. J. W. Abert states in his report that when he visited Colorado in 1846, he found the Flicker with yellow wings common all along the Arkansas River in Kansas and that they continued to be common westward in Colorado at least to the mouth of the Purgatory River. Abert ascended the Arkansas to the site of the present town of La Junta, and then went southwestward to Raton Pass. It was not until he was half way between La Junta and Trinidad that he saw the Red-shafted Flicker, and here both the yellow and the red forms were common. A great change has taken place in the distribution of these two forms during the sixty years that have elapsed since Abert's Colorado visit. Now the yellow-winged form is extinct in the whole Arkansas Valley of Colorado and the red-shafted form has extended its range eastward throughout this whole region and far into Kansas.

Antrostomus vociferus. WHIPPOORWILL.— The first record for Colorado is that of one taken September 14, 1903, at Fort Collins and sent to the Biological Survey for identification (Burnett).

Cypseloides niger borealis. BLACK SWIFT.— A female in the collection of Geo. B. Sennett is labeled as taken at Denver, June 26, 1884. This is the most northeastern record for the State.

Aëronautus melanoleucus. WHITE-THROATED SWIFT.— Found at Pawnee Buttes in northeastern Weld County (Henderson). Common breeder in Chimney Cañon near Sterling (Cary).

Selasphorus platycercus. BROAD-TAILED HUMMINGBIRD.— Hummingbirds have been seen at Springfield May 24, 1908 (Alexander) and at Yuma May 31, 1905, September 5, 1908, and October 3, 1908 (Patten). In each case the records probably belong to the above species, and these seem to be the first records of hummingbirds from the plains of eastern Colorado.

Selasphorus rufus. RUFOUS HUMMINGBIRD.— One, August 27, 1904, near Antonito (Bailey).

Stellula calliope. CALLIOPE HUMMINGBIRD.— The two previous records of this species for Colorado are each of single birds; it is surprising therefore that several should have been seen in one day August 27, 1904, at Antonito, by Vernon Bailey of the Biological Survey.

Tyrannus tyrannus. KINGBIRD.— Not uncommon during migration in northwestern Colorado. Steamboat Springs, Craig and Lay (Warren). Near Rifle, near Boggs Crossing, Meeker, and Edwards's Sheep Camp in Routt County (Cary). One was seen in June at Navajo Springs, Montezuma County (Gilman). This is apparently the most southwestern record in the United States.

Tyrannus verticalis. ARKANSAS KINGBIRD.— The average date of arrival at Yuma is May 6, and of departure September 16; the extremes are April 30, 1905, and September 23, 1904 (Patten). Breeds in Baca County (Warren) — the most southeastern breeding record in Colorado.

Myiarchus cinerascens. ASH-THROATED FLYCATCHER.— One in 1907 at Douglas Spring near Dotsero (Warren). A great extension eastward of the known range results from the capture of one May 25 1905, at Gaume's Ranch, Baca County (Warren).

Myiochanes virens. WOOD PEWEE.— The one taken May 12, 1905, near Springfield, gives the first record for Colorado (Warren).

Otocoris alpestris leucolæma. DESERT HORNED LARK.— The statement is made in the original bulletin that "the literature of the Horned Larks in Colorado is more mixed than that of any other bird; *alpestris*, *cornuta*, *occidentalis* and *chrysolaema* have all been recorded for the State, but according to present ideas only *leucolæma* and *arenicola* really occur in Colorado." Changes in nomenclature during the past twelve years have made the matter still more complex. It has been found that *arenicola* is a synonym of *leucolæma* and must be dropped, while two new names *praticola* and *hoyti* have to be taken into consideration.

According to present ideas all the breeding birds and almost all of the winter birds, in spite of the wide variation in color, are referable to *leucolæma*.

[**Otocoris alpestris arenicola.** DESERT HORNED LARK.— This name is dropped from the Colorado list as being a synonym of *leucolæma*.]

Otocoris alpestris praticola. PRAIRIE HORNED LARK.— Accidental, once at Denver (Oberholser). First and only record for Colorado.

[**Otocoris alpestris hoyti.** HOYT'S HORNED LARK.— Breeds near the Arctic Circle and comes south in winter to the northern United States. It has been taken south to Camp Floyd, Utah, and to Emporia, Kans., and hence undoubtedly occurs in winter on the plains of northeastern Colorado.]

Cyanocitta cristata. BLUE JAY.— It seems strange in view of the commonness of the bird in Wray County, that it should have been so lately added to the Colorado list. The number of 'The Auk' for January, 1905, contains records by Smith and Henderson of its occurrence at Wray and at Yuma. The species is now known to occur locally along the whole eastern edge of the state, from Holly to Julesburg; it is a common breeder at Wray and wintered there 1907-8; it ranges west to Yuma, where it was first seen in 1903, and has been noted in summer from May 19 to November 1, but is not yet known to remain through the winter. It has also been recorded west to Limon (Felger) and to Springfield (Alexander). A

possible explanation of its late addition to the Colorado bird list may be that the species has moved west with the settlements through Kansas and Nebraska and has only lately reached Colorado.

Aphelocoma woodhousei. WOODHOUSE'S JAY.—Common November 26–29, 1907, at Gaume's Ranch, Baca County, and undoubtedly winters in that vicinity (Cary). This is the most eastern record for Colorado.

Cyanocephalus cyanocephalus. PIXON JAY.—This species was found by Warren to be quite common, April and May, 1905, among the cedars of Baca County. Cary found them common in the same region November 26–29, 1907, but there is no proof as yet that they breed in the vicinity. Noted at Yuma, September 26–October 13, 1906 (Patten).

Dolichonyx oryzivorus. BOBOLINK.—So many records have been contributed the last few years that it seems probable the species is becoming more common in the State. Some of these records are: Beulah, May 18, 1906 (Jones); Salida, May 14, 1908 (Frey); Middle Park, near the Troublesome River, July 11, 1897 (Smith); near Steamboat Springs, June 1–10, 1907, probably breeding (Warren); Meeker, probably breeding, 1905 and 1906 (Hopkins); Boulder, many seen for four consecutive years, 1902–1905, during May and July, showing that they have become established as regular migrants; not yet known to breed in this vicinity (Henderson). No sure breeding records as yet in Colorado.

Agelaius phoeniceus fortis. THICK-BILLED REDWING.—Much information has been gathered the past few years in regard to the Red-winged Blackbirds of Colorado. Where only one form was recognized in 1897, there are now three forms, *fortis*, *neutralis* and *arctolegus*; while the typical form *phoeniceus* is now restricted to the eastern United States. The above form, *fortis*, breeds on the plains of Colorado east of the mountains, and also west in the foothills, at least to Estes Park at 7500 feet altitude. It winters on the plains from Denver southward.

Agelaius phoeniceus neutralis. SAN DIEGO RED-WING.—This form probably breeds in Colorado west of the main range and winters irregularly north at least to Grand Junction.

[**Agelaius phoeniceus arctolegus.** NORTHERN RED-WING.—This is a northern form, breeding north of the United States and coming south in winter to Colorado. A specimen was taken December 29, 1892, at Semper, and the form will probably prove not uncommon on the plains of north-eastern Colorado. This form has not yet been accepted by the A. O. U. Committee.]

Icterus spurius. ORCHARD ORIOLE.—Common summer resident at Wray, and breeds (Smith). This is the first breeding record for the State. Seen at Yuma, May 17 and 19, 1908, (Patten).

Icterus galbula. BALTIMORE ORIOLE.—Common summer resident at Wray and breeds (Smith). The first certain breeding record for Colorado. Seen at Yuma, May 22, 1905, May 22, 1906, May 24, 1907 (Patten).

Icterus bullocki. BULLOCK'S ORIOLE.—Has been noted as a common breeder, along the eastern edges of the State from Baca County to Yuma County.

Euphagus carolinus. RUSTY GRACKLE.—A small flock February 20, 1909, near Littleton (Richards).

Hesperiphona vespertina montana. WESTERN EVENING GROSBEEK.—Eggs taken in Estes Park in 1903 (Dille). Young just out of the nest, July 22, 1898, in Routt County (Smith).

Carpodacus mexicanus frontalis. CALIFORNIA LINNETT.—Not rare at Yuma (Patten). Breeds east to Gaume's Ranch, Baca County (Warren). This is the most eastern breeding record in the State.

Loxia leucoptera. WHITE-WINGED CROSSBILL.—A pair, August, 1906, at 8400 feet altitude on Upper Bear Creek, Clear Creek County (Knaebel).

Leucosticte tephrocotis. GRAY-CROWNED ROSY FINCH.—Two, February 15, 1903, Altona (Dille).

Leucosticte atrata. BLACK ROSY FINCH.—One, April 6, 1907, Sulphur Spring, Grand County (Warren).

Leucosticte australis. BROWN-CAPPED ROSY FINCH.—Two, January, 1906, and several January, 1907, near Fort Lewis; a pair on the summit of the La Plata Mountains June 24 and July 22 1906 (Gilman).

Astragalinus tristis. GOLDFINCH.—Specimens recently examined from the plains of eastern Colorado, from the foothills near Denver, and even from Livermore, within the lower foothills, all prove to be the eastern form.

Astragalinus psaltria. ARKANSAS GOLDFINCH.—The Colorado bird list in 1900 included this species and two subspecies. Since then it has been ascertained that the forms *arizonæ* and *mexicanus* represent merely plumage variations due to age. These two forms are therefore withdrawn from the list. The species ranges north to Meeker, where found common August, 1905 (Cary). East to Las Animas, July, 1892 (Fisher).

Calcarius ornatus. CHESTNUT-COLLARED LONGSPUR.—One, April 5, 1906, at Cortez (Gilman).

Rhynchophanes mccowni. McCOWN'S LONGSPUR.—Abundant breeder at Pawnee Buttes, June, 1909 (Cary).

Zonotrichia querula. HARRIS'S SPARROW.—One October 9, 1907, near Kit Carson, Cheyenne County (Smith). One October 22, 1908, New Windsor (Osterhout). These are the third and fourth records for the State.

Zonotrichia coronata. GOLDEN-CROWNED SPARROW.—A flock of fifteen at Salida April 19, 1908 (Frey). Second record for Colorado.

Zonotrichia albicollis. WHITE-THROATED SPARROW.—One, May 3, 1908, Yuma (Patten). Fourth record for the State.

Spizella passerina arizonæ. WESTERN CHIPPING SPARROW.—Specimens of the Chipping Sparrow taken in extreme eastern Colorado, at Springfield, Baca County, prove to be the western form, which is there a tolerably common breeder (Warren).

[**Spizella passerina.** CHIPPING SPARROW.—It seems probable in the light of the above record, that the typical eastern form does not occur in the State, and it will therefore be withdrawn from the Colorado list until some undoubted specimen is obtained.]

***Spizella pallida*.** CLAY-COLORED SPARROW.—Breeds south on the plains to Monon, Baca County (Warren).

***Spizella breweri*.** BREWER'S SPARROW.—Ranges east to Monon, Baca County and breeds (Warren). Common breeder at Yuma in 1909 (Cary). Seen at Sterling, July 1892 (Fisher).

***Spizella pusilla arenacea*.** WESTERN FIELD SPARROW.—Yuma, May 9–11, 1908 (Patten). First record for Colorado.

***Junco aikenii*.** WHITE-WINGED JUNCO.—Common November 27, 1907, at Gaume's Ranch, Baca County (Cary).

***Junco hyemalis*.** SLATE-COLORED JUNCO.—Two, April 6, 1905, Lamar (Warren).

***Junco hyemalis oregonus*.** OREGON JUNCO.—One near Denver, October 16, 1885 (Smith). First record for Colorado.

***Junco hyemalis montanus*.** MONTANA JUNCO.—One, November 27, 1907, Gaume's Ranch, Baca County (Cary). One of the most widely distributed Juncos in the State during the winter.

***Junco phænotus caniceps*.** GRAY-HEADED JUNCO.—One was taken January 18, 1904, at Boulder and sent to the Biological Survey for identification. Most northern record in winter.

***Amphispiza bilineata deserticola*.** DESERT SPARROW.—Tolerably common breeder at Gaume's Ranch, Baca County; taken there May 18–25, 1905 (Warren). This is a large extension of the known range eastward.

***Amphispiza nevadensis*.** SAGE SPARROW.—One, March 18, 1904, near Boulder (Dille). This is the first record in Colorado east of the front range.

***Peucaea cassinii*.** CASSIN'S SPARROW.—It had been expected that this species would be found in Colorado, and the first record for the State came from the southeastern corner where it was most likely to occur—near Springfield, May 27, 1905 (Warren). But an entirely unexpected extension of the known range was the finding of the species breeding at Barr. Eggs were taken there July 14, 1907. (Hersey and Rockwell).

***Aimophila ruficeps scotti*.** SCOTT'S SPARROW.—One near Trinidad, September 17, 1903 (Howell). This is the first record for Colorado and the most northern record for this subspecies.

***Melospiza georgiana*.** SWAMP SPARROW.—One was taken October 2, 1907, near Mosca (Cary). This is the second record for the State and the first west of the mountains.

***Passerella iliaca schistacea*.** SLATE-COLORED SPARROW.—Three, spring of 1906, near Fort Lewis in southwestern Colorado (Gilman). These are the first reported from that part of the State.

***Pipilo maculatus montanus*.** MOUNTAIN TOWHEE.—Many years ago Thorne published the statement that this form sometimes occurred at Fort Lyon. That eastward record has lately been exceeded by the taking of a specimen April 28, 1905, at Monon, close to the Kansas line (Warren). One, taken at Lamar, May 17, 1907, by H. G. Smith was sent to the Biological Survey for identification. The Mountain Towhee is of course only a migrant on the plains.

Pipilo fuscus mesoleucus. CAÑON TOWHEE.— Abundant November, 1907, at Gaume's Ranch in northwestern Baca County and noted to the northward to Caddoa in the Arkansas Valley (Cary). These are the most eastern records in the State, though the species had previously been reported almost as far east at Watervale, August, 1906, and April, 1907 (Smith). The most northern record is that of the specimen collected at Boulder March 17, 1895 (Smith).

Oreospiza chlorura. GREEN-TAILED TOWHEE.— Occurs in migration on the plains almost to the Kansas line; common in spring in Baca County; Monon, May 3, 1905, and Springfield, May 11, 1905 (Warren). Seen at Yuma in the spring from May 3, 1906, to June 11, 1907, and in the fall from September 24, 1904, to September 30, 1908 (Patten).

Zamelodia ludoviciana. ROSE-BREASTED GROSBEEK.— A pair near Loveland, June 1, 1902 (Burnett).

Guiraca caerulea lazula. WESTERN BLUE GROSBEEK.— Las Animas, July 1892, not rare (Fisher); Wray, a fairly common breeder (Smith); Yuma, seen each spring for the last five years, earliest May 17, 1907 (Patten); Altona, one, August 16, 1901 (Felger); Altona, several, about June 18, 1902 (Dille); Loveland, a pair June 7, 1902 (Burnett).

Passerina cyanea. INDIGO BUNTING.— One May 7, 1901, near Denver (Felger); one June 9, 1906, at Hugo (Ferrill).

Spiza americana. DICKCISSEL.— Not rare, July, 1892, at Sterling (Fisher).

Calamospiza melanocorys. LARK BUNTING.— Breeds south to Navajo Springs, La Plata County (Gilman); to Trinidad (Fisher); and to Baca County (Warren). In other words, the southern limit of the breeding range coincides quite closely with the southern boundary of Colorado. A very late migrant was seen November 7, 1907, at Saguache (Cary).

Piranga ludoviciana. WESTERN TANAGER.— Comes east regularly in migration to Yuma, where it has been noted in the spring from May 10 to June 4 and in the fall on October 5, 1908 (Patten).

Piranga erythromelas. SCARLET TANAGER.— One May 17, 1902, at Palmer Lake (Smith); one May 20, 1904, Pueblo (Smith); one June 4, 1904, Grand Junction (Rockwell).

Progne subis. PURPLE MARTIN.— Several, August, 1905, White River Plateau, 8000–9000 feet (Cary); one at 9000 feet July, 1907, Uncompahgre Plateau (Cary).

Bombycilla garrula. BOHEMIAN WAXWING.— Comes south on the plains to Yuma, where it was seen January 22, 1905, and January 17–18, 1907 (Patten).

Lanius borealis. NORTHERN SHRIKE.— South in winter almost to the southern boundary of the State; a few November, 1907, at Gaume's Ranch, Baca County (Cary); one at Earl, Las Animas County, November, 1907 (Cary). One at Silverton, October 28, 1893 (Loring).

Vireosylva olivacea. RED-EYED VIREO.— Fairly common spring and fall migrant at Yuma; extreme dates are May 18 and September 8 (Patten).

Lanivireo solitarius cassini. CASSIN'S VIREO.—Douglas Spring, Routt County, September 4, 1906 (Cary); Silverton, October 21, 1893 (Loring); near Creswell, Jefferson County, September 9, 1887 (Smith); near Denver, September 16, 1884 (Smith).

Lanivireo solitarius plumbeus. PLUMBEOUS VIREO.—Solitary Vireos, presumably of this form, have been seen at Yuma in May of both 1905 and 1907 (Patten).

Vireo belli. BELL'S VIREO.—One, Denver, June 12, 1903 (Smith). This is the first record for Colorado. Later it was found as a fairly common breeder along the eastern edge of the State at Holly, Wray and Julesburg (Smith). One at Yuma, May 8, 1906 (Patten).

Vireo vicinior. GRAY VIREO.—Four specimens were taken at Lamar, May 16–20, 1907 (Smith). This is the first and only record for Colorado and an extension two hundred miles to the northeast of the previously known range.

Mniotilta varia. BLACK AND WHITE WARBLER.—One May 23, 1907, at Holly (Smith).

[**Protonotaria citrea.** PROTHONOTARY WARBLER.—Has been credited to the State (Auk, XXIV, 1907, 342) on the strength of three specimens said to have been taken near Monument and at Pueblo. There is evidently a mistake in the locality where the specimens were obtained for the Prothonotary is a swamp warbler and would find no congenial surroundings near Pueblo to say nothing of the pine clad hills of Monument. The species better wait for further proof, before it takes a place in the Colorado list.]

Vermivora chrysoptera. GOLDEN-WINGED WARBLER.—One May 25, 1906, at Yuma (Patten). This is the first record for the State.

Vermivora virginiae. VIRGINIA'S WARBLER.—A large extension of the known range to the eastward is the result of the one taken May 3, 1905, at Monon, Baca County (Warren).

Vermivora peregrina. TENNESSEE WARBLER.—Two, May 20–21, 1904, Wray (Smith); abundant at the same place May 21–23, 1909 (Cary). Common May, 1907, at Holly, Manzanola, Kit Carson and Julesburg (Smith).

Compsothlypis americana usneæ. NORTHERN PARULA WARBLER.—One near Denver, May 5, 1904 (Smith); a flock of about a dozen May 27, 1907, at Kit Carson (Smith).

[**Dendroica æstiva sonarana.** SONORA YELLOW WARBLER.—Later investigations make it probable that all the Yellow Warblers of Colorado should be classed under the one form *æstiva*. The above form *sonarana* is therefore withdrawn from the State list.]

Dendroica cærulescens. BLACK-THROATED BLUE WARBLER.—One, September 18, 1903, Wray (Smith). Seen at Yuma, September 19, 1904; September 10, 1906 and October 6, 1906 (Patten).

Dendroica coronata. MYRTLE WARBLER.—One, December 31, 1907, Holly (Smith). This is the first winter record for Colorado.

***Dendroica magnolia*.** MAGNOLIA WARBLER.—One, May 12, 1905, near Springfield (Warren). One May 22, 1907, Holly (Smith). Two, May 21, 1909, near Wray.

***Dendroica gracæ*.** GRACE'S WARBLER.—Several May, 1907, Pagosa Springs (Cary).

***Dendroica nigrescens*.** BLACK-THROATED GRAY WARBLER.—One July, 1892, Trinidad (Fisher); several September 4-8, 1906, Douglas Spring, Routt County (Cary). The most northern record in western Colorado.

***Dendroica townsendi*.** TOWNSEND'S WARBLER.—One August 14, 1894, Estes Park (Fisher); one August 24, 1906, near Bagg's Crossing, Routt County (Cary).

***Seiurus aurocapillus*.** OVENBIRD.—Seen May 18, 1906, and September 18, 1906, at Yuma, (Patten).

***Oporornis tolmiei*.** MACGILLIVRAY'S WARBLER.—Several May, 1905, Springfield (Warren). Noted at Yuma each May for the last four years (Patten). Sterling, June 1-2, 1909 (Cary).

***Geothlypis trichas occidentalis*.** WESTERN YELLOW-THROAT.—One July, 1905, in Middle Park near Hot Sulphur Springs (Cary). This is a higher altitude than usual.

[***Icteria virens*.** YELLOW-BREASTED CHAT.—This form was admitted to the original list through a misunderstanding. It has no Colorado record and should be dropped.]

***Setophaga ruticilla*.** REDSTART.—A few August 25-27, 1906, near Bagg's Crossing of the Snake River, Routt County (Cary); several May 17-24, 1908, Salida (Frey).

***Oroscoptes montanus*.** MOUNTAIN MOCKINGBIRD.—One, April 21, 1905, near Springfield (Warren); one October 10, 1904, Yuma (Patten).

***Mimus polyglottos leucopterus*.** WESTERN MOCKINGBIRD.—Common on the plains of southeastern Colorado, north to Yuma (Patten); abundant June, 1906, at Pawnee Buttes, northeastern Weld County (Henderson). Common at Sterling in 1909 (Cary). One May 23, 1907, near McCoy at 6800 feet altitude — the most northwestern record (Warren).

***Dumetella carolinensis*.** CATBIRD.—A few breed near Fort Lewis, La Plata County; one at Mancos May 3, 1906 (Gilman).

***Catherpes mexicanus conspersus*.** CAÑON WREN.—Observed by the parties of the Biological Survey in many localities in southwestern Colorado, east to the plains and north to the Grand River. The most northwestern record is that of the one seen September 12, 1906, near Rangely, Rio Blanco County (Cary). Along the southern part of the State it has been traced east to Baca County, where one was seen November 27, 1907, at Gaume's Ranch (Cary) and near Cheyenne Wells, one November 22, 1906 (Warren). The most northern records east of the mountains are of those obtained at Golden February and October, 1907 (Test) and at Longmont, October 20, 1907 (Burnett).

***Thryomanes bewicki bairdi*.** BAIRD'S WREN.—Records for this species have gradually accumulated until now it is known to be more common in

southwestern Colorado than it is east of the range, where it was first discovered in the State. It breeds locally but not uncommonly in western Colorado and has been observed north to Rangely, where two were noted, September 17, 1906, and to Elk Springs, Routt County, where one was seen September 11, 1906 — the most northwestern record for the State (Cary). East of the mountains the species has been recorded from Colorado Springs, Loveland, Pueblo, Fort Lyon, Holly, and from Gaume's Ranch, Baca County. It had been supposed that these records from the plains referred to the plains form *cryptus* and the one from Gaume's Ranch was so recorded by Cary (Auk, XXVI, 1909, 184), as had been done previously by Ridgway (Birds N. & Mid. Am., III, 1904, 555), for all the Bewick Wrens of Colorado. An examination of the specimen taken by Smith at Holly, May 23, 1907, shows it to be *bairdi* and makes it evident that all Bewick Wrens in Colorado belong to the one form.

Cistothorus stellaris. SHORT-BILLED MARSH WREN.— One was shot October 23, 1907, and another seen the next day near Mosea — the first record for Colorado and the only record for the species west of the mountains (Cary).

Certhia familiaris montana. ROCKY MOUNTAIN CREEPER.— Yuma, October 22–25, 1904 (Patten).

Sitta carolinensis nelsoni. ROCKY MOUNTAIN NUTHATCH.— The former lists of Colorado birds have given the white-bellied Nuthatches under two forms, *carolinensis* and *aculeata*. Both these names should be withdrawn and in their place the above name should be employed for all the white-bellied Nuthatches of Colorado.

Bæolophus inornatus griseus. GRAY TITMOUSE.— Common September 1906, in the Escalante Hills of Routt County — the most northern record for the State (Cary).

Psaltiriparus plumbeus. LEAD-COLORED BUSH-TIT.— Two flocks, September 4 and 8, 1906, near Douglas Spring, Routt County — the most northern record for the State (Cary).

Polioptila cærulea obscura. WESTERN GNATCATCHER.— In 1897, there was no record for a Gnatcatcher in western Colorado. Now the records have multiplied until it is known locally from many places north to Grand Junction. Fairly common breeder near Cortez and near the Dolores River in southwestern Montrose County, June and July 1907 (Cary); Grand Junction, common, May 17, 1906 (Ferrill); Walsenburg, one, May 21, 1907 (Cary); Boulder, one May 12, 1905 (Henderson). This last is the most northern record for Colorado.

Myadestes townsendi. TOWNSEND'S SOLITAIRE.— Eggs July 27, 1906, near Arkins at 6200 feet altitude — nearly two thousand feet lower than usual (Cary); Gaume's Ranch, Baca County, abundant November 26–29, 1907 (Cary); noted in migration at Yuma May 24–25 and September 6 to November 5 (Patten).

Hylocichla mustelina. WOOD THRUSH.— One, May 27, 1905, at Yuma — the first record for the State (Patten).

***Hylocichla guttata*.** ALASKA HERMIT THRUSH.—Monon, Baca County, May 3, 1905 (Warren).

[***Hylocichla guttata pallasi*.** HERMIT THRUSH.—There seems to have been a misunderstanding or a mixing of specimens that served as the basis of the record on which this species was admitted to the Colorado list. All efforts to locate the Thorne specimens have proved unavailing and it seems best to withdraw the name from the State list.]

***Sialia sialis*.** BLUEBIRD.—Fairly common in extreme eastern Colorado, from the Arkansas River to the Platte, and breeds near Holly (Smith). Noted each year at Yuma, the extreme dates of observation being April 18 and November 1 (Patten). Denver, eggs June 21, 1899 (Dille).

***Sialia mexicana bairdi*.** CHESTNUT-BACKED BLUEBIRD.—Yuma, one February 28, 1906 (Patten).

***Sialia currucoides*.** MOUNTAIN BLUEBIRD.—Gaume's Ranch, Baca County, common November 26–29, 1907 (Cary); Springfield, March 1–22, 1908 (Alexander); Yuma, February 28, 1906, and March 18, 1907 (Patten).

THE SINGULAR CASE OF THE BLACK DUCK OF NORTH AMERICA.

BY JONATHAN DWIGHT, JR., M. D.

THE case of the Black Duck is one of extreme interest to many people, partly because the species is one of the best known of the North American water-fowl and partly because the naming of a new race has been productive of unexpected consequences. First a shuffle of the scientific names was found necessary and now the new 'race' itself seems to be based upon nothing more tangible than the adult birds, as becomes evident from the material I have gathered. The pitfalls, nomenclatural as well as ornithological, into which even the most eminent authorities may fall are singularly illustrated in a full discussion of the case. As yet, some facts have been missing and some misinterpreted, so that the whole story needs to be retold and from a new standpoint.

Th e nomenclatural side may be very briefly dismissed here, as *it* has already been thoroughly discussed in the pages of 'The Auk' (Vol. XXVI, April, 1909, pp. 175–179). It was in 1902 (Auk, XIX,